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| 08/808,827 | 02/28/1997 | WALTER HENRY GUNZBURG | GSF97-01A | 6837 |

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|---|
| BRUSCA, JOHN S |

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| 1631 | 33 |

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Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. 08/808,827 | Applicant(s) GUNZBURG ET AL. | |
|---|---|---|---|
| | Examiner Brusca S John | Art Unit 1631 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *11 February 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,5,7,9-26,28,29 and 31-101* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5,7,9-26,28,29 and 31-101* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

1. The papers received on 11 February 2002 have not been made part of the permanent records of the United States Patent and Trademark Office (Office) for this application (37 CFR 1.52(a)) because of damage from the United States Postal Service irradiation process. The above-identified papers, however, were not so damaged as to preclude the USPTO from making a legible copy of such papers. Therefore, the Office has made a copy of these papers, substituted them for the originals in the file, and stamped that copy:

COPY OF PAPERS

ORIGINALLY FILED

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If applicant wants to review the accuracy of the Office=s copy of such papers, applicant may either inspect the application (37 CFR 1.14(d)) or may request a copy of the Office's records of such papers (*i.e.*, a copy of the copy made by the Office) from the Office of Public Records for the fee specified in 37 CFR 1.19(b)(4). Please do **not** call the Technology Center's Customer Service Center to inquiry about the completeness or accuracy of Office's copy of the above-identified papers, as the Technology Center's Customer Service Center will **not** be able to provide this service.

If applicant does not consider the Office's copy of such papers to be accurate, applicant must

provide a copy of the above-identified papers (except for any U.S. or foreign patent documents submitted with the above-identified papers) with a statement that such copy is a complete and accurate copy of the originally submitted documents. If applicant provides such a copy of the above-identified papers and statement within **THREE MONTHS** of the mail date of this Office action, the Office will add the original mailroom date and use the copy provided by applicant as the permanent Office record of the above-identified papers in place of the copy made by the Office. Otherwise, the Office's copy will be used as the permanent Office record of the above-identified papers (*i.e.*, the Office will use the copy of the above-identified papers made by the Office for examination and all other purposes). This three-month period is not extendable.

### *Claim Rejections - 35 USC 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 5, 7, 9-26, 28, 29, 31, 32, and 56-78 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims have been amended to recite the phrase "a heterologous promoter other than a promoter from a retrovirus upon which the retroviral vector is based or a promoter from a subtype of the retrovirus upon which the retroviral vector is based." The applicants have failed to

note support for the amendment as required in MPEP 714.02 and 2163.06. A review of the specification does not reveal subject matter that supports the amendment recited above. While the specification provides an example of insertion of a promoters from a cellular gene, it does not provide support for the claimed genus of retroviral promoters.

Applicant's arguments filed 11 February 2002 have been fully considered but they are not persuasive. The Applicants point to support for MMTV and WAP promoters, but fail to show description of the claimed genus of promoters.

4. The rejection of claim 7 under 35 U.S.C. § 112, second paragraph in the Office action mailed 18 July 2001 is withdrawn in view of the amendment filed 11 February 2002.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 5, 7, 9-26, 28, 29, 31, 32, and 56-78 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 5, 7, 9-26, 28, 29, 31, 32, and 56-78 are indefinite for recitation of the phrase "a heterologous promoter other than a promoter from a retrovirus upon which the retroviral vector is based or a promoter from a subtype of the retrovirus upon which the retroviral vector is based" because the metes and bounds of the claimed promoter are unclear.

In view of the indefiniteness rejection above, the rejections under 35 U.S.C. § 103 include new grounds of rejection as it is not clear which prior art retroviral promoters are within the metes and bounds of the claimed invention.

***Claim Rejections - 35 USC 103***

7. The rejections of cancelled claim 8 in the Office action mailed 18 July 2001 were in error in view of the cancelled status of the claim. The rejection of claim 15 over Couture et al. in view of Faustinella et al. in the Office action mailed 18 July 2001 has been withdrawn because the references do not show a cellular promoter.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couture et al. in view of Faustinella et al.

Couture et al. (Reference AS in the Form PTO-1449 filed 9/23/97) shows retroviral vectors comprising a substitution of a portion of the 3' U3 region with the corresponding region

of 5 different murine retroviruses, including leukemia and sarcoma retroviruses. Couture et al. shows on page 669 column 2 that the first 40 nucleotides of the original vector are retained in the substitution of the U3 region. The vector of Couture comprises a chloramphenicol acetyl transferase marker gene and a neomycin resistance gene. Couture et al. shows in the abstract that after packaging, the substituted U3 region appears at the 5 LTR and serves as a promoter for all genes in the body of the vector, and that different LTR constructs were preferentially expressed in specific cell types. Couture et al. states in the second paragraph of the Results section on page 669 that U3 regions are bound by cellular factors. Couture et al. shows in Table 3 that their chimeric LTR promoters are active in a cell type specific manner. Couture et al. state on page 670 that promoter suppression or interference may occur within retroviral vectors containing internal promoter elements. Couture et al. states on page 667 that retroviral vectors with target cell specificity have utility in gene therapy protocols. Couture et al. shows the use of packaging cell lines PA317 and GP&E86 on page 669 to package their retroviral vectors. Couture et al. does not show a vector comprising a multiple cloning site in the U3 region.

Faustinella et al. shows in figure 1 Moloney murine leukemia retroviral vector pS3. pS3 comprises a partial deletion of the 3 U3 region, into which has been inserted a polylinker with unique cloning sites, for example the Bsa AI site and the Nae I site used to construct the vectors of figure 2.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the vectors of Couture et al. by adding the multiple cloning site of Faustinella et al. because Faustinella et al. shows that multiple cloning sites may be used to insert sequences of choice in a U3 region of a retroviral vector.

10. Claims 1, 5, 7, 9, 11, 12, 16-25, 28, 29, 31, 32, 56-59, 61, 62, 65-72, and 74-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above, and further in view of Mee et al.

Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above does not show mouse mammary tumor virus (MMTV) promoters or regulatory elements.

Mee et al. shows a retroviral vector comprising a mouse mammary tumor virus LTR, and that the LTR expressed a gene after induction with dexamethasone. Mee et al. state on page 292 that their vector is a potentially powerful tool for the manipulation of gene expression in a variety of cell types.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the vector of Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above by insertion of an MMTV promoter region in a deleted 3' U3 region of a retroviral vector because Mee et al. show that their LTR promoter may be used to manipulate gene expression in a variety of cell types.

11. Claims 1, 5, 7, 9, 11, 12, 15-25, 28, 29, 31-35, 38, 39, 42-49, 51-55, 79-82, 84, 85, 88-95, and 97-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above, and further in view of Mehigh et al.

Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above does not show cellular promoters or regulatory elements.

Mehigh et al. shows a retroviral vector comprising a whey acidic acid protein (WAP) promoter. Mee et al. states in the abstract that their vector allows for inducible expression from the WAP promoter of an operably linked gene in MBDK cells and may prove useful as a delivery system for peptides in cattle to increase milk production.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the vector of Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above by insertion of a WAP promoter region in a deleted 3' U3 region of a retroviral vector because Mehigh et al. shows that such vectors are inducibly expressed and may allow for increased milk production in cattle.

12. Claims 1, 13, 14, 33, 40, 41, 56, 63, 64, 79, 86, and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of:

1)Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above,

2)Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above, and further in view of Mee et al. as applied to claims 1, 5, 7, 9, 11, 12, 16-25, 28, 29, 31, 32, 56-59, 61, 62, 65-72, and 74-78,

3) Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above, and further in view of Mehigh et al. as

applied to claims 1, 5, 7, 9, 11, 12, 15-25, 28, 29, 31-35, 38, 39, 42-49, 51-55, 79-82, 84, 85, 88-95, and 97-101,

and further as evidenced by Miller et al. and Panganiban et al.

The three combinations of references cited above do not explicitly show an altered retroviral gene or a partially deleted sequence involved in integration of retroviruses.

Couture et al. shows in figure 1 a retroviral vector LCSN and a derivative of LCSN. Couture et al. shows in the Methods section on page 668 that their vectors are derivatives of the vectors of Miller et al.

Miller et al. shows in figure 2 that their vectors retain the phi+ packaging sequence, but lack the gag, pol, and env genes of a replication-competent retrovirus.

Panganiban '84 shows that the 3' end of the pol gene encodes the int locus that is required for integration of the reverse transcribed retroviral genome to form a provirus.

Therefore the vectors of claims 13 and 14 are taught by the above cited combinations of references as evidenced by Miller et al. and Panganiban et al.

13. Claims 1, 10, 33, 37, 56, 60, 79, 83, 89, and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of:

1)Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above,

2)Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above, and further in view of Mee et al. as applied to claims 1, 5, 7, 9, 11, 12, 16-25, 28, 29, 31, 32, 56-59, 61, 62, 65-72, and 74-78,

3) Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above, and further in view of Mehigh et al. as applied to claims 1, 5, 7, 9, 11, 12, 15-25, 28, 29, 31-35, 38, 39, 42-49, 51-55, 79-82, 84, 85, 88-95, and 97-101,

and further in view of Price et al.

The three combinations of references cited above do not explicitly show retroviral vectors derived from BAG vectors.

Price et al. shows a BAG retroviral vector comprising a beta galactosidase reporter gene, and that the vector can be used to identify cells and progeny of cells infected with the vector.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the vector of the above cited combinations of references by basing the construction on a BAG vector of Price et al. because Price et al shows that a vector with a beta-galactosidase reporter gene may be used to identify cells and progeny of cells infected with the vector.

14. Claims 17, 20, 21, 26, 28, 43, 50, 51, 52, 53, 66, 73, 74, 75, 76, 89, 96, 97, 98, and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of:

1)Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above,

2)Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above, and further in view of Mee et al. as applied to claims 1, 5, 7, 9, 11, 12, 16-25, 28, 29, 31, 32, 56-59, 61, 62, 65-72, and 74-78,

3) Couture et al. in view of Faustinella et al. as applied to claims 1, 5, 9, 11, 1216-25, 28, 29, 31, 32, 56, 57, 59, 61, 62, 65-72, and 74-78 above, and further in view of Mehigh et al. as applied to claims 1, 5, 7, 9, 11, 12, 15-25, 28, 29, 31-35, 38, 39, 42-49, 51-55, 79-82, 84, 85, 88-95, and 97-101,

and further in view of Longmore et al. and Kay et al.

The three combinations of references cited above do not show use of retroviruses in animals.

Longmore et al show in the abstract that mice infected with a retroviral vector expressing the erythropoietin receptor had increased platelet counts and splenic megakaryocytes.

Kay et al. shows in the abstract and throughout that hemophiliac dogs infected with a retroviral vector expressing factor IX shows improved levels of clotting and thromboplastin times for greater than 5 months after treatment.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of the combinations of references cited above to express a therapeutic protein because both Kay et al. and Longmore et al. show that retroviral vectors may be used to express therapeutically effective levels of a recombinant protein in an animal.

15. Applicant's arguments filed 11 February 2002 have been fully considered but they are not persuasive.

The Applicants argue that the exhibit of Ethelberg et al. supplied with the amendment filed 11 February 2002 demonstrates that the applied prior art does not meet the limitations of the claims. It is believed that the Applicants intended to point to page 1204 of Ethelberg rather than

page 1024. Ethelberg does not discuss the full range of retroviral promoters shown in Couture et al. In addition, Ethelberg et al. shows on page 1204 that SL3-3 and Moloney MLV promoters have different cell specificities. It remains unclear whether the instant claims read on retroviral vectors comprising SL3-3 promoters.

The Applicants appear to argue that Junker et al. shows that rearrangements are due to the presence of heterologous promoters. A review of Junker et al. at page 644 shows that the vector disclosed in Junker et al. is most likely unstable because it has 22 base direct repeats. The prior art cited in this Office action does not use the vector of Junker et al.

The Applicants state without support that deletion of the U3 region was taught by the prior art to result in termination of transcription within the 5' LTR U5 region, resulting in a lack of expression of downstream genes. The Applicants conclude that the results disclosed in the instant specification of expression from a deleted U3 region vector is therefore an unexpected result. The MPEP states in section 716.02(b):

**716.02(b) Burden on Applicant**

**BURDEN ON APPLICANT TO ESTABLISH RESULTS ARE UNEXPECTED AND SIGNIFICANT**

The evidence relied up should establish "that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance." *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992) (Mere conclusions in appellants' brief that the claimed polymer had an unexpectedly increased impact strength "are not entitled to the weight of conclusions accompanying the evidence, either in the specification or in a declaration."); *Ex parte C*, 27 USPQ2d 1492 (Bd. Pat. App. & Inter. 1992) (Applicant alleged unexpected results with regard to the claimed soybean plant, however there was no basis for judging the practical significance of data with regard to maturity date, flowering date, flower color, or height of the plant.). See also *In re Nolan*, 553 F.2d 1261, 1267, 193 USPQ 641, 645 (CCPA 1977) and *In re Eli Lilly*, 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990) as discussed in MPEP § 716.02(c).

**APPLICANTS HAVE BURDEN OF EXPLAINING PROFFERED DATA**

"[A]ppellants have the burden of explaining the data in any declaration they proffer as evidence of non-obviousness." *Ex parte Ishizaka*, 24 USPQ2d 1621, 1624 (Bd. Pat. App. & Inter. 1992).

The Applicants have failed to provide evidence that their alleged unexpected result of the claimed invention would have been known to one of skill in the art at the time of filing. The Applicant's attention is directed to the attached reference Felder et al., which is prior art to the instant application. Felder et al. shows that retroviral U3 region mutants without polyadenylation activity are viable and useful as vectors. The Applicant's attention is further drawn to the attached Scott et al. which shows that HIV retroviral 5' LTR regions induce polyadenylation to form short unstable transcripts. Scott et al. (not prior art) provides evidence that the Applicant's rationale for a requirement to suppress 5'LTR polyadenylation is not required for retroviral vector expression. It is further noted that the claims have been amended to require that the deletion of the U3 region is a partial deletion for reasons of record in the Office action mailed 16 March 1998.

The Applicants state that the teachings of Couture et al. and Faustinella et al. are contradictory in that Couture et al. shows promoters inserted in a U3 region that are not directly linked to an open reading frame, while Faustinella inserts a promoter directly linked to an open reading frame into a U3 region. However, as noted in the rejections above, Couture et al. shows that internal promoters are undesirable in retroviral vectors, and therefore provides motivation to place a promoter in an LTR region that is not directly linked to the open reading frame of the expressed sequence. Faustinella et al. is cited only for its teaching of a polylinker in the U3 region as a convenient structure to insert a desired sequence by recombinant DNA techniques.

***Conclusion***

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Brusca whose telephone number is 703 308-4231. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 708 308-4323. The fax phone numbers for the organization where this application or proceeding is assigned are 703 746-5137 for regular communications and 703 746-5137 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-4028.

John S. Brusca
Primary Examiner
Art Unit 1631

jsb
April 30, 2002